

## ABSTRACT OF THE DISCLOSURE

Compositions and methods are provided for the treatment of conditions associated with cell proliferation, cell differentiation and cell survival. In particular, the dual-specificity phosphatase DSP-15, and polypeptide variants thereof that stimulate dephosphorylation of DSP-15 substrates, are provided. The polypeptides may be used, for example, to identify antibodies and other agents that inhibit DSP-15 activity. The polypeptides and agents may be used to modulate cell proliferation, differentiation and survival.